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REMARKS

Claims 1-21 were pending in the application. Claims 4, 5, 9, 10, 13, 18, and 21 have been amended and claim 2 has been cancelled. Accordingly, claims 1 and 3-21 are presently being examined.

Section 1 of the Office Action rejected claims 13, 18 and 21 under 35 U.S.C. §101 because the use of a composition is not patentable.

Applicants hereinabove have amended claims 13, 18 and 21 to more clearly recite a method, that is: "A method of promoting char formation comprising the step of..." "burning" (claim 18 and 21) or "combusting" (claim 13). Support for these amendments can be found, inter alia, on page 5 in lines 24-32 of the subject specification. Accordingly, amended claims 13, 18 and 21 do not recite a "use of a composition" but rather a method of promoting char formation. Thus, applicants respectfully submit that amended claims 13, 18 and 21 are no longer unpatentable under 35 U.S.C. §101.

In view of the amendments to claims 13, 18 and 21 and the remarks above, applicants respectfully request that the rejection of these claims under 35 U.S.C. §101 be reconsidered and withdrawn.

Sections 2 and 4 of the Office Action rejected claims 4, 5, 9 and 10 under 35 U.S.C. §112, second paragraph, as being indefinite because these claims recite improper Markush language.

Applicants hereinabove have amended claims 4, 5, 9 and 10 to more clearly recite the subject matter of the present invention by employing proper Markush language to recite certain compounds which can be second fillers. Support for

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these amendments can be found, inter alia, on page 4 in lines 1-12 of the present specification as published under International (PCT) Publication No. WO 00/066657. Accordingly, applicants respectfully submit that amended claims 4, 5, 9 and 10 are not indefinite.

In view of the amendments to claims 4, 5, 9 and 10 and the remarks above, applicants respectfully request that the rejection of these claims under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

Section 2 and 5 of the Office Action rejected claim 2 under 35 U.S.C. §112, second paragraph, as being indefinite because the claim recites the trademark CLOISITE.

Applicants hereinabove have cancelled claim 2. Accordingly, applicants respectfully submit that the rejection of claim 2 is now moot.

In view of the cancellation of claim 2 and the remarks above, applicants respectfully request that the rejection of claim 2 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

Sections 6-8 of the Office Action rejected claims 1-7, 9-12, 14-17, 19 and 20 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,255,318 to Kaide et al. ("Kaide patent").

According to the Office Action, the Kaide patent discloses polymer and hydrated metallic oxide in claim 1, aluminum hydroxide in claim 2, magnesium hydroxide in claim 3, bentonite, clay calcium carbonate, talc and their blends in claim 5 and that the components surround a cable.

Applicants respectfully submit that "clay" or "bentonite" as used in the Kaide patent, see claim 5 or column 4, lines 18-27 of the Kaide patent, is different from "nano-clay" as strictly

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required in the claims of the present application.

Unlike the "clay" or "bentonite" as used by the Kaide patent, "nano-clays" are clays which have been modified using a quaternary ammonium compound, see page 2, lines 1 to 3 of the subject specification. The use of organic modifiers (quaternary ammonium compounds) in the preferred nano-clays, such as the CLOISITE products is also evident from the table on page 2 of the subject specification. As discussed by the subject specification, the inventors of the subject invention found, as recited in independent claims 1, 9, 10, 14 and 15, that a combination of such nano-clays with a second filler shows a synergistic effect as a flame retardant additive and surprisingly and significantly increases the strength of the char that forms during combustion, see page 3, lines 15 to 21 and page 5, lines 24 to 32 of the subject specification.

In contrast, the Kaide patent neither discloses nor suggests such a synergistic effect (clay or bentonite are only optional compounds in the Kaide patent), and also is completely silent about any modification of the clay or bentonite as a prerequisite for the nano-clay used according to the present invention as recited in independent claims 1, 9, 10, 14 and 15. Therefore, applicants respectfully submit that the Kaide patent does not anticipate or render obvious the subject matter of these claims.

Since claims 2-7, 11, 12, 16, 17, 19 and 20, depend directly or indirectly on claims 1, 9, 10, 14 or 15, and because a claim which depends on another claim is subject to all the limitations of that other claim, applicants respectfully submit that claims 2-7, 11, 12, 16, 17, 19, and 20 are not anticipated by the Kaide patent for at least the same reasons discussed

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above with respect to independent claims 1, 9, 10, 14, and 15.

In view of the remarks above, applicants respectfully request that the rejection of claims 1-7, 9-12, 14-17, 19 and 20 under 35 U.S.C. §102(b) be reconsidered and withdrawn.

Sections 9-12 of the Office Action rejected claims 1-12, 14-17, 19 and 20 as being unpatentable over the Kaide patent in view of U.S. Patent No. 3,576,388 to Bruns ("Bruns patent").

According to the Office Action, the Bruns patent teaches polyvinyl chloride or neoprene flame resistant cable coating and fillers, namely bentonite, clay and calcium carbonate and that since neoprene and PVC are equivalent as wire and cable insulation as discussed by the Bruns patent, it would have been obvious to one having ordinary skill in the art at the time the invention was made to flameproof the composition of the Bruns patent with the fillers of the Kaide patent.

Applicants respectfully submit that, as with the Kaide patent, the Bruns patent is completely silent about the use of a nano-clay as taught by the subject invention and as recited in independent claims 1, 9, 10, 14 and 15. As discussed above, the subject specification teaches a nano-clay, that is, a clay modified using a quarternary ammonium compound and its synergistic effect in combination with a second filler. Therefore, it is respectfully submitted that the Kaide patent in view of the Bruns patent does not render obvious the subject matter of these pending claims.

Because claims 3-8, 11, 12, 16, 17, 19 and 20 depend directly or indirectly on claims 1, 9, 10, 14 or 15, and because a claim which depends on another claim is subject to all the limitations of that other claim, applicants respectfully submit that claims 3-8, 11, 12, 16, 17, 19 and 20 are not anticipated

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by nor unpatentable over the Kaide patent and/or the Bruns patent taken alone or in combination, for at least the same reasons discussed above with respect to independent claims 1, 9, 10, 14 and 15.

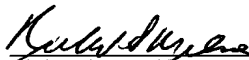
In view of the remarks above, and the amendments to claims 4, 5, 9, 10, 13, 18 and 21, applicants respectfully request that the rejections and objections in the Office Action be reconsidered and withdrawn, and earnestly solicit a Notice of Allowance.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

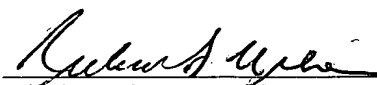
No fees, other than the fee for a three-month extension of time, are deemed necessary in connection with the filing of this Amendment. However, if any such fees are required, authorization is hereby given to charge the amount of any such fees to Deposit Account No. 03-3125.

Respectfully submitted,

I hereby certify that this paper is being deposited this date with the U.S. Postal Service as first class mail addressed to: Commissioner for Patents
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22 June 2006 Date


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